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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/507,453 | 09/13/2004 | Gerd Reime | REP-0027 | 1401 |

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CANTOR COLBURN, LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

EXAMINER

DOAN, JENNIFER

ART UNIT PAPER NUMBER

2874

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/507,453

Applicant(s)

REIME ET AL.

Examiner

Jennifer Doan

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26,28-31,33 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42,43 and 45-50 is/are allowed.
- 6) ☒ Claim(s) 26,28-31,33 and 38-41 is/are rejected.
- 7) ☒ Claim(s) 32 and 34-37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment, filed on September 14, 2006, has been considered and entered.

Claims 26, 28-43 and 45-50 are now pending.

Claims 26, 42 and 49 are amended. Claims 27 and 44 are cancelled. The previous ground of rejection is now changed in this Office Action in response to the amendment of claims 26, 42 and 49. Since the new ground of rejection is necessitated by the amendment, this office action is made final.

Specification

1. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26, 28-31, 33 and 38-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Walter et al. (EP 249746 A2).

With respect to claims 26, 40 and 41, Walter et al. (figure 1) disclose a device for optoelectronically detecting movement and/or position of an object comprising at least one transmitting element (11) for emitting radiation in the optical wavelength range and at least one receiving element (12) for receiving at least a part of the radiation emitted by the transmitting element and reflected back by the object and also comprising an optical guide (1) arranged in the beam path between the transmitting element and the receiving element (see figure 1), wherein the optical guide (1) comprises at least one light coupling element (2) for at least one of coupling-in the radiation previously radiated through the optical guide (1) and diffusely scattered at the object transversely to the longitudinal extent of the optical guide, and coupling-out radiation radiated to the optical guide by the transmitting element transversely to the longitudinal extent of the optical guide; wherein signals derived by the at least one receiving element are used as input for a writing recognition system and the at least one transmitting element (11) remains illuminated after a key associated therewith is actuated (see figure 1 and the abstract).

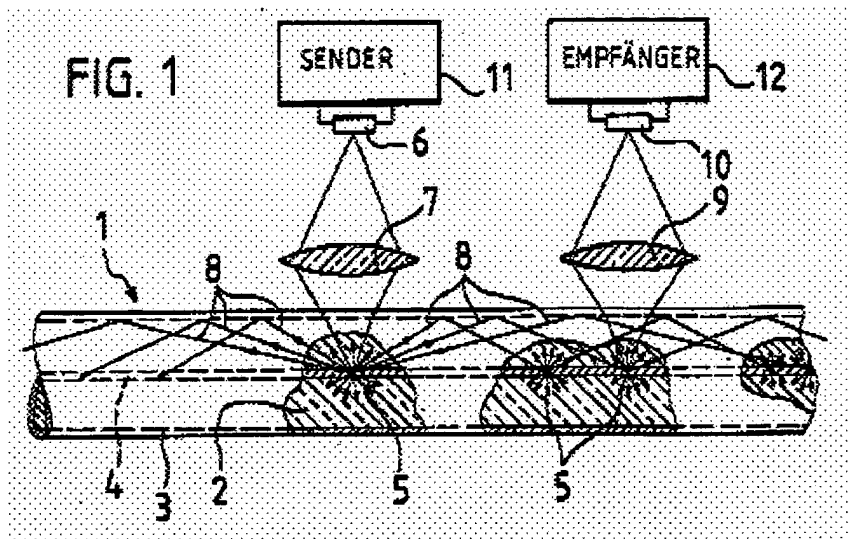
With respect to claims 28 and 29, Walter et al. (figure 1) disclose the device, wherein the radiation radiated through the optical guide (1) by the transmitting element (11) is radiated transversely through the optical guide from the side opposite the object and wherein radiation emitted along the optical guide (1) by the transmitting element (11) is at least partially coupled-out of the optical guide by the at least one light coupling element (2) before it is scattered by the object.

Art Unit: 2874

With respect to claim 30, Walter et al. (figure 1) disclose the device, wherein the at least one light coupling element (2) is a forming at the side of the optical guide facing away from the object transversely approaching the optical guide (1).

With respect to claims 31 and 33, Walter et al. (figure 1) disclose the device, wherein the optical guide (1) comprises a plurality of light coupling elements (2) which are spatially associated with a respective transmitting element (11) and wherein the transmitting elements are arranged in the form of a keyboard and in that a curved or circular-segment-shaped light coupling element is associated with each key (see figure 1).

With respect to claims 38 and 39, Walter et al. (figure 1) disclose the device, wherein a plurality of light coupling elements (2) is arranged in the form of a matrix or a circle (see figure 1).



Allowable Subject Matter

4. Claims 32 and 34-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or reasonably suggest a device, wherein the transmitting elements are arranged in the form of a keyboard and in that a curved or circular-segment-shaped light coupling element is associated with each key as recited in claim 32; wherein a compensating device for compensating for extraneous light comprises a clock pulse generator for controlling the multiplexing of a plurality of transmitting elements which emit radiation into a plurality of radiation measuring sections, and also a synchronous demodulator which is controlled by the clock pulse generator for associating the detected signal in the form of a measured value with the individual measuring sections, and in that, in dependence on the detected values, at least one compensating LED emits light for compensating the extraneous light as recited in claim 34; wherein the at least one transmitting element and/or the at least one receiving element are arranged at the edge of the optical guide spaced from the light coupling element as recited in claim 37.

5. Claims 42, 43 and 45-50 are allowed.

The prior art of record fails to disclose or reasonably suggest a method for optoelectronically detecting movement and/or position of an object comprising the steps

of evaluating the input signal for determining the movement and/or the position of the object in combination with the other limitations of claim 42.

Claims 43 and 45-50 depend from claim 42.

Response to Arguments

6. Applicants' argument filed on September 14, 2006 has been fully considered.

7. With respect to claims 26, 28-43 and 45-50:

On pages 6-7 of the remarks, it is argued that the device of Reime et al. fails to teach a device, "...wherein at least one off a diffusely backscattered radiation is coupled into the optical guide by at least one light coupling element of the optical guide itself transversely relative to a longitudinal extent of the optical guide, and a radiation emitted through the optical guide by at least one transmitting element is radiated by at least one list coupling element of the optical guide itself transversely to the longitudinal extent of the optical guide.".

The examiner fully agrees with these applicants' arguments that the apparatus and method for making the device of Reime distinguishes from the apparatus and method for making the device of the applicants' invention. However, the examiner respectfully submits that a new ground of rejection based on the newly cited reference has been applied to claims 26, 28-43 and 45-50 in response to the amendment of the claims.

Please refer to claim rejections 35 U.S.C. 102 above for claims 26, 28-31, 33 and 38-41.

Claims 32 and 34-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 42, 43 and 45-50 are allowed.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2874


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

November 20, 2006


JENNIFER DOAN
PRIMARY EXAMINER